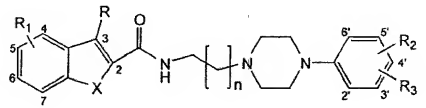
AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended)A compound of the general formula (I) or a pharmaceutically acceptable salt thereof



(I)

wherein:

n=1-4 ~~and~~

R=hydrogen, alkyl or halogen, and

~~(a)~~ X=S or O;~~, and wherein~~

(i) when R_1 is hydroxy, alkyloxy, alkenyl, alkinyl, aryl, acyl, alkoxycarbonyl or cyano, ~~each of~~ R_2 and R_3 are independently selected from hydrogen, hydroxy, alkyloxy, alkyl, alkenyl, alkinyl, aryl, halogen, trifluoromethyl, acyl, alkoxycarbonyl and cyano, and

(ii) when R_1 is hydrogen, alkyl, halogen or trifluoromethyl, R_2 is selected from hydroxy, alkenyl, alkinyl, aryl, acyl, alkoxycarbonyl and cyano and R_3 is selected from hydrogen, hydroxy, alkyloxy, alkyl, alkenyl, alkinyl, aryl, halogen, trifluoromethyl, acyl, alkoxycarbonyl and cyano,

~~or~~

~~(b) X=NH: R_1 is selected from hydrogen, hydroxy, alkyl, alkyloxy, alkenyl, alkinyl, aryl, trifluoromethyl, acyl, alkoxycarbonyl, halogen and cyano and~~

~~each of R_2 and R_3 are selected independently from hydrogen, hydroxy, alkyloxy, alkyl, alkenyl, alkinyl, aryl, halogen, trifluoromethyl, acyl, alkoxycarbonyl and cyano, with the proviso that the compound is not N-4-(4-(2-methoxyphenyl)piperazine-1-yl)butyl-2-indolylcarbamide,~~

~~or~~

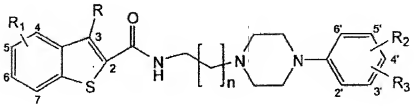
~~(c) X=Te: R_1 is selected from hydrogen, hydroxy, alkyl, alkyloxy, alkenyl, alkinyl, aryl, halogen, trifluoromethyl, acyl, alkoxycarbonyl and cyano and each of R_2 and R_3 are selected independently from hydrogen, hydroxy, alkyloxy, alkyl, alkenyl, alkinyl, aryl, halogen, trifluoromethyl, acyl, alkoxycarbonyl and cyano.~~

wherein the groups alkyl, alkenyl, alkinyl and aryl may optionally be substituted independently of one another~~,~~

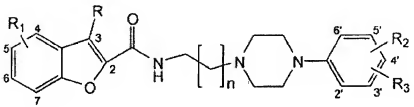
~~and pharmaceutically acceptable salts of this compound~~.

2. (cancelled)

3. (currently amended)A compound or a pharmaceutically acceptable salt thereof according to claim 1, the compound having the general formula (Ia) or (Ib):



(Ia)



(Ib)

wherein:

n=1-4,

R=hydrogen, C_1-C_6-alkyl or halogen,

when R_1 is hydroxy, C_1-C_6-alkyloxy, C_2-C_6-alkenyl, C_2-C_6-alkinyl, phenyl ~~that may~~ optionally ~~be~~ substituted with a methoxy group or halogen, C_1-C_6-acyl, C_1-C_6-alkoxy carbonyl or cyano, each of R_2 and R_3 are independently selected from hydrogen, hydroxy, C_1-C_6-alkyloxy, C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-alkinyl, phenyl ~~that may~~ optionally ~~be~~ substituted with a methoxy group or halogen, halogen, trifluoromethyl, C_1-C_6-acyl, C_1-C_6-alkoxycarbonyl and cyano,

when R_1 is hydrogen, C_1-C_6-alkyl, halogen or trifluoromethyl, R_2 is selected from hydroxy, C_2-C_6-alkenyl, C_2-C_6-alkinyl, phenyl that may optionally be substituted with a methoxy group or halogen, C_1-C_6-acyl, C_1-C_6-alkoxycarbonyl and cyano, and R_3 is selected from hydrogen, hydroxy, C_1-C_6-alkyl, C_1-C_6-alkyloxy, C_2-C_6-alkenyl, C_2-C_6-alkinyl, phenyl that may optionally be substituted with a methoxy group or halogen, halogen, trifluoromethyl, C_1-C_6-acyl, C_1-C_6 alkoxycarbonyl, and cyano, and

wherein the groups C_1-C_6-alkyl, C_2-C_6-alkenyl and C_2-C_6-alkinyl may optionally also be substituted independently of one another~~,~~

~~and pharmaceutically acceptable salts thereof.~~

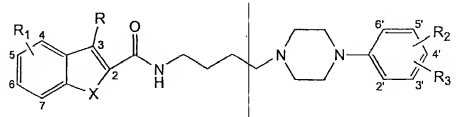
4. -5. (cancelled)

6. (currently amended) A compound or salt thereof according to claim 1 wherein

- the substituent R_1 is in position 5 or 6 of the heterocycle, and
- the substituents R_2 and R_3 are in the positions 2 or 3, respectively, or in the positions 2 or 4, respectively, of the phenyl ring; the respective other substituent being in position 2 of the phenyl ring in the event that one of the two substituents R_2 and R_3 is a hydrogen atom.

7. (currently amended) A compound or salt thereof according to claim 1 wherein n=3.

8. (currently amended)A compound of the general formula (IV) or a pharmaceutically acceptable salt thereof:



(IV)

wherein:

X=S ,~~NH~~ or O,

R is selected from hydrogen, C_1-C_6-alkyl, fluorine, chlorine and bromine,

R_1 is selected from hydrogen, C_1-C_6-alkoxy, C_1-C_6-alkyl, fluorine, chlorine, bromine, trifluoromethyl and cyano, R_1 being in position 5 or 6 of the heterocycle,

R_2 and R_3 are independently selected from hydrogen, C_1-C_6-alkyloxy, C_1-C_6-alkyl, fluorine, chlorine, bromine and trifluoromethyl, R_2 and R_3 being in the positions 2 or 3, respectively, or in the positions 2 or 4, respectively, of the phenyl ring, and the respective other substituent being in position 2 of the phenyl ring in the event that one of the two substituents R_2 and R_3 is a hydrogen atom, and

wherein the C_1-C_6 alkyl groups are optionally substituted independently of one another

~~and pharmaceutically acceptable salts of this compound with the proviso that the compound is not N-4-(4-(2-methoxyphenyl)piperazine-1-yl)butyl-2-indolylcarbamide~~.

9. (currently amended)A compound or salt according to claim 8, wherein ~~when X=NH, then R_1 is selected from hydrogen, C_1-C_3-alkyloxy, C_1-C_3-alkyl, fluorine, chlorine, bromine and cyano, and when X=S or O, then~~ R_1 is selected from hydrogen, C_1-C_3-alkyl, fluorine, chlorine, bromine, cyano and trifluoromethyl.

10. (currently amended)A compound according to claim 1 selected from

N-4-(4-(2-methoxyphenyl)- ~~piperazine~~piperazin-1-yl)butyl-5-cyano-2-benzo[b]thiophenylcarbamide,

N-4-(4-(2,3-dichlorophenyl) ~~piperazine~~piperazin-1-yl)butyl-5-cyano-2-benzo[b]thiophenylcarbamide,

N-4-(4-(2-methoxyphenyl) ~~piperazine~~piperazin-1-yl)butyl-6-cyano-2-benzo[b]thiophenylcarbamide,

N-4-(4-(2,3-dichlorophenyl) ~~piperazine~~piperazin -1-yl)butyl-6-cyano-2-benzo[b]thiophenylcarbamide,

N-4-(4-(2-methoxyphenyl) ~~piperazine~~piperazin-1-yl)butyl-2-benzo[b]thiophenylcarbamide,

N-4-(4-(2,3-dichlorophenyl) ~~piperazine~~piperazin-1-yl)butyl-2-benzo[b]thiophenylcarbamide,

N-4-(4-(2-methoxyphenyl) ~~piperazine~~piperazin-1-yl)butyl-5-bromo-2-benzo[b]thiophenylcarbamide,

N-4-(4-(2,3-dichlorhenyl) ~~piperazine~~piperazin-1-yl)butyl-5-bromo-2-benzo[b]thiophenylcarbamide,

~~N-4-(4-(2,3-dichlorophenyl)piperazine-1-yl)butyl-2-indolylcarbamide,~~

~~N-4-(4-(2-methoxyphenyl)piperazine-1-yl)butyl-5-cyano-2-indolylcarbamide,~~

~~N-4-(4-(2-methoxyphenyl)piperazine-1-yl)butyl-5-bromo-2-indolylcarbamide,~~

~~N-4-(4-(2-methoxyphenyl)piperazine-1-yl)butyl-6-cyano-2-indolylcarbamide,~~

~~N-4-(4-(2,3-dichlorophenyl)piperazine-1-yl)butyl-5-bromo-2-indolylcarbamide,~~

~~N-4-(4-(2,3-dichlorophenyl)piperazine-1-yl)butyl-6-cyano-2-indolylcarbamide,~~

~~N-4-(4-(2,3-dichlorophenyl)piperazine-1-yl)butyl-5-cyano-2-indolylcarbamide,~~

N-4-(4-(2-methoxyphenyl) ~~piperazine~~piperazin-1-yl)butyl-5-cyano-2-b-benzo[b]furanylcarbamide,

N-4-(4-(2-methoxyphenyl) ~~piperazine~~piperazin-1-yl)butyl-2-benzo[b]furanylcarbamide,

N-4-(4-(2,3-dichlorophenyl) ~~piperazine~~piperazin-1-yl)butyl-2-benzo[b]furanylcarbamide,

N-4-(4-(2-methoxyphenyl) ~~piperazine~~piperazin-1-yl)butyl-5-bromo-benzo[b]furanylcarbamide,

N-4-(4-(2,3-dichlorophenyl) ~~piperazine~~piperazin-1-yl)butyl-5-bromo-2-benzo[b]furanylcarbamide,

~~N-4-(4-(2-methoxyphenyl)piperazine-1-yl)butyl-2-benzo[b]tellurophenylcarbamide und~~

~~N-4-(4-(2,3-dichlorophenyl)piperazine-1-yl)butyl-2-benzo[b]tellurophenylcarbamide~~

and pharmaceutically acceptable salts thereof.

11. – 13. (cancelled)

14. (currently amended)A therapeutic agent ~~containing~~ comprising one or more of the compounds or salts according to claim 1 and a pharmaceutically acceptable carrier.

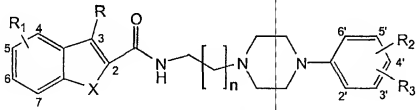
15. (currently amended)A therapeutic agent according to claim 14 further comprising ~~which additionally contains~~ L-DOPA for simultaneous or sequential administration to the patient.

16. (currently amended) ~~The use of a compound according to claim 1 for preparing a therapeutic agent~~ A method for the therapy or prevention of cocaine, alcohol, opiate and nicotine addiction; neurodegenerative disorders, especially Parkinson's disease; sexual dysfunction; depression or schizophrenia, the method comprising administering to a subject in need of such treatment a therapeutic agent comprising a compound or salt according to claim 1.

17. (currently amended) ~~The use of a compound according claim 1 for preparing a therapeutic agent~~ A method for the therapy or prevention of hyperprolactinaemia; hyperprolactinoma; glaucoma; cognitive disorders; restless leg syndrome; hyperactivity syndrome (ADHS); locomotion disorders associated with Parkinson's disease; L-DOPA-induced disorders, Segawa syndrome; tardive locomotion disorders as well as for medication-assisted ablactation after pregnancies the method comprising administering to a subject in need of such treatment a therapeutic agent comprising a compound or salt according to claim 1.

18. (currently amended) ~~The use~~ A method according to claim 17, the therapeutic agent being provided for the therapy or prevention of Segawa syndrome; spontaneous dyskinesia or dystonia associated with Parkinson's disease or tardive or L-DOPA induced dyskinesia or dystonia.

19. (currently amended) A method for therapy or prevention of cocaine, alcohol, opiate and nicotine addiction; neurodegenerative disorders, especially Parkinson's disease; or sexual dysfunction, comprising administering to subject in need of such treatment a therapeutic agent comprising ~~The use of~~ a compound of the general formula (III) or a pharmaceutically acceptable salt thereof:



(III)

wherein:

n=1-4 and X=S, ~~or~~ or O ~~or NH~~,

~~when~~

R[[=]] is hydrogen, alkyl or halogen, ~~and~~

R_1 is ~~substituted by the radicals~~ hydrogen, alkyl, halogen, or trifluoromethyl, and

~~each of~~ R_2 and R_3 are ~~substituted~~ individually or jointly ~~by the radicals~~ hydrogen, hydroxy, alkyloxy, alkyl, alkenyl, alkinyl, aryl, halogen, trifluoromethyl, acyl, alkoxycarbonyl, or cyano~~, for preparing a pharmaceutical agent for the therapy or prevention of cocaine, alcohol, opiate and nicotine addiction; neurodegenerative disorders, especially Parkinson's disease; or sexual dysfunction~~.

20. (currently amended) ~~The use of a compound~~ A method according to claim 19 for ~~preparing a therapeutic agent for~~ the therapy or prevention of depression or schizophrenia.

21. (currently amended) ~~The use of a compound~~ A method according to claim 19 for ~~preparing a therapeutic agent for~~ the therapy or prevention of hyperprolactinaemia; hyperprolactinoma; glaucoma; cognitive disorders; restless leg syndrome; hyperactivity syndrome (ADHS); locomotion disorders associated with Parkinson's disease; L-DOPA-induced disorders, Segawa syndrome; tardive locomotion disorders as well as for medication-assisted ablactation after pregnancies.

22. (currently amended) ~~The use~~ A method according to claim 21, ~~the therapeutic agent being used~~ for the therapy or prevention of Segawa syndrome, spontaneous dyskinesia or dystonia associated with Parkinson's disease or tardive or L-DOPA induced dyskinesia or dystonia.

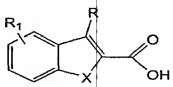
23. (currently amended) ~~The use~~ A method according to claim 19 wherein R is selected from hydrogen, C_1-C_6 alkyl, fluorine, chlorine and bromine, R_1 is selected from hydrogen, C_1-C_6 alkoxy, C_1-C_6 alkyl, fluorine, chlorine, bromine and trifluoromethyl, and ~~each of~~ R_2 and R_3 ~~is~~ are independently selected from hydrogen, C_1-C_6 alkoxy, C_1-C_6 alkyl, fluorine, chlorine, bromine and trifluoromethyl

wherein the groups C_1-C_6 alkyl may optionally also be substituted.

24. (currently amended) ~~The use~~ A method according to claim 19, wherein the substituent R_1 is in position 5 or 6 of the heterocycle, and the substituents R_2 and R_3 are in the positions 2 or 3, respectively, or in the positions 2 or 4, respectively, of the phenyl ring; the respective other substituent being in position 2 of the phenyl ring in the event that one of the two substituents R_2 and R_3 is a hydrogen atom.

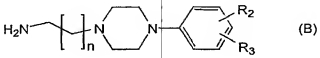
25. (cancelled)

26. (currently amended)A method for preparing a compound of claim 1, ~~the general formulae (I), (III), or (IV) as defined above~~ comprising reacting a compound of the general formula (A) in activated form, especially in the form of the carboxylic acid halide



(A)

with a compound of the general formula (B):



(B)

~~wherein n, R, R_1, R_2 and R_3 are as defined for the general formulae (I), (III) and (IV).~~

27. (cancelled)

28. (new) A method according to claim 16, further comprising administering L-dopa.

29. (new) A method according to claim 19, further comprising administering L-dopa.

30. (new) A pharmaceutical composition comprising a compound or salt according to claim 3 and a pharmaceutically acceptable carrier.

31. (new) A pharmaceutical composition according to claim 30, further comprising L-dopa.

32. (new) A pharmaceutical composition comprising a compound or salt according to claim 7 and a pharmaceutically acceptable carrier.

33. (new) A pharmaceutical composition according to claim 32, further comprising L-dopa.

34. (new) A pharmaceutical composition comprising a compound or salt according to claim 8 and a pharmaceutically acceptable carrier.

35. (new) A pharmaceutical composition according to claim 34, further comprising L-dopa.

36. (new) A pharmaceutical composition comprising a compound or salt according to claim 10 and a pharmaceutically acceptable carrier.

37. (new) A pharmaceutical composition according to claim 36, further comprising L-dopa.

38. (new) A method of treating a disease state characterized by disorders in signal transduction of the D3 receptor, comprising administering to a patient in need of such treatment an effective amount of a D3 ligand, wherein the D3 ligand is selected from compounds or salts of claim 1.

39. (new) A method according to claim 38, further comprising administering L-dopa.